(a) selectively energizing the ultrasound transducer in one of an imaging mode and a therapy mode;

(b) while energizing the ultrasound transducer in the imaging mode, selectively reducing a quality factor associated with the ultrasound transducer; and

(c) while energizing the ultrasound transducer in the therapy mode, enabling a substantially greater quality factor to be associated with the ultrasound transducer, than when operating in the imaging mode.

2. ~~23.~~ (Currently amended.) The method of Claim 1 ~~22~~, wherein the step of selectively reducing the quality factor comprises the step of actuating a switch that causes a resistance to be coupled in parallel with the ultrasound transducer.

3. ~~24.~~ (Currently amended.) The method of Claim 1 ~~22~~, wherein the step of selectively reducing the quality factor comprises the step of coupling the ultrasound transducer to an imaging damping network, while the step of enabling the substantially higher quality factor comprises the step of coupling a therapy damping network to the ultrasound transducer.

4. ~~25.~~ (Currently amended.) The method of Claim 1 ~~22~~, further comprising the step of repeating steps (a) – (c) together for each of a plurality of ultrasound transducer elements comprising an ultrasound applicator, while the ultrasound applicator is inserted inside a patient's body to successively image and administer ultrasound therapy to an internal site within the patient's body.

5. ~~26.~~ (Currently amended.) The method of Claim 4 ~~25~~, further comprising the step of interrupting administration of ultrasound therapy in order to image the internal site to determine a status of the internal site and to evaluate a progress of the ultrasound therapy.

6. ~~27.~~ (Currently amended.) A flexible ultrasound transducer comprising:

(a) a thermally and electrically conductive layer;

(b) a plurality of ultrasound transducer elements supported by the thermally and electrically conductive layer, in a spaced-apart array, adjacent ultrasound transducer elements in the array being separated by a kerf that is filled with a deformable material that readily expands and contracts without being damaged during bending of the array;

(c) an outer impedance matching layer disposed over an outer surface of the thermally and electrically conductive layer; and

(d) a plurality of electrodes disposed on an opposite end of each of the plurality of ultrasound transducer elements from that supported by the thermally and electrically conductive layer, said plurality of ultrasound transducer elements being energized by a signal applied between the plurality of electrodes and the thermally and electrically conductive layer, said flexible ultrasound transducer being bendable to a desired radius of curvature to achieve a desired focal point for the flexible transducer.

7. ~~28.~~ (Currently amended.) The flexible ultrasound transducer of Claim 6 ~~27~~, further comprising a housing in which the flexible array is mounted.

8. ~~29.~~ (Currently amended.) The flexible ultrasound transducer of Claim 6 ~~27~~, wherein each of the plurality of ultrasound transducer elements comprises a composite mixture that includes a piezo-ceramic, an adhesive binder, and thermally conductive particles.

9. ~~30.~~ (Currently amended.) The flexible ultrasound transducer of Claim 6 ~~27~~, further comprising a movable shaft attached to one end of the array, said movable shaft being movable to change a spacing between opposite ends of the array and thereby to achieve the desired radius of curvature, and thereby to achieve the desired focal point.

10. ~~31.~~ (Currently amended.) The flexible ultrasound transducer of Claim 9 ~~30~~, further comprising a prime mover that is coupled to drivingly move the shaft when the

prime mover is selectively energized, said prime mover being energized to move the movable shaft to achieve the desired radius of curvature and the desired focal point.

11. ~~32.~~ (Currently amended.) The flexible ultrasound transducer of Claim 6 ~~27~~, further comprising a carriage on which the array is supported, said carriage being movable to control a direction in which an ultrasound beam emitted by the plurality of ultrasound transducer elements is directed.

12. ~~33.~~ (Currently amended.) The flexible ultrasound transducer of Claim 11 ~~32~~, wherein the carriage is coupled to a movable shaft that is moved to move the carriage.

13. ~~34.~~ (Currently amended.) The flexible ultrasound transducer of Claim 12 ~~33~~, wherein the shaft is coupled to a prime mover that is selectively energized to move the carriage, and thereby, to move the array.

14. ~~35.~~ (Currently amended.) The flexible ultrasound transducer of Claim 12 ~~33~~, wherein the carriage is translatable along a longitudinal axis of the carriage to move the array longitudinally.

15. ~~36.~~ (Currently amended.) The flexible ultrasound transducer of Claim 6 ~~27~~, further comprising a solenoid and a support rod coupled to the array and selectively actuated by said solenoid to achieve the desired radius of curvature and the desired focal point for the array by changing a spacing between opposite ends of the array.

16. ~~37.~~ (Currently amended.) The flexible ultrasound transducer of Claim 6 ~~27~~, further comprising a movable link attached to the array, said movable link being movable to change a curvature shape and orientation of the array and thereby to steer an ultrasound beam emitted by the array in a desired direction.

17. ~~38.~~ (Currently amended.) The flexible ultrasound transducer of Claim 6 ~~27~~, further comprising a limit stop that abuts against a back of the array to control a curvature shape of the array.

18. ~~39.~~ (Currently amended.) The flexible ultrasound transducer of Claim 6 ~~27~~, further comprising a plurality of pins that act against a back of the array to define a curvature shape of the array.

19. ~~40.~~ (Currently amended.) The flexible ultrasound transducer of Claim 18 ~~39~~, wherein the pins are movable to vary the curvature shape of the array and thus, to control a focus point of the array.

20. ~~41.~~ (Currently amended.) The flexible ultrasound transducer of Claim 19 ~~40~~, further comprising a key having a plurality of surfaces that act upon the plurality of pins to define the curvature of the array and thus, the focal point of the array.

21. ~~42.~~ (Currently amended.) The flexible ultrasound transducer of Claim 20 ~~41~~, wherein the plurality of surfaces of the key are cam shaped and wherein the key is adapted to vary the position of the pins and thereby, to vary the focus of the array as the key is moved.

22. ~~43.~~ (Currently amended.) A method for selectively controlling at least one of a direction in which an ultrasound beam is emitted by an ultrasound transducer and a focus point of the ultrasound transducer, comprising the steps of:

(a) providing a flexible transducer array that includes a plurality of ultrasound transducer elements supported on a flexible layer;

(b) energizing the plurality of ultrasound transducer elements so that they emit an ultrasound beam; and

(c) enabling a user to selectively cause the flexible transducer array to bend so that the flexible transducer array assumes a curvature that achieves at least one of a desired direction and a desired focal point for the ultrasound beam emitted by the plurality of ultrasound transducer elements.

23. ~~44.~~ (Currently amended.) An ultrasound transducer that emits an

ultrasound beam in at least one of a desired direction and at a desired focal point, comprising:

(a) a plurality of separate ultrasound transducer elements that are pivotally mounted in a spaced-apart array; and

(b) a plurality of actuators coupled to the plurality of ultrasound transducer elements and adapted to selectively rotate the plurality of separate ultrasound transducer elements about an axis of each, thereby orienting each of the plurality of separate ultrasound transducer element so that it is directed in a desired direction, and so that when energized, the plurality of separate ultrasound transducer elements collectively emit an ultrasound beam in at least one of a desired direction and a desired focal point.

24. ~~45.~~ (Currently amended.) The ultrasound transducer of Claim 23 ~~44~~, wherein each of the plurality of actuators includes a prime mover and a linkage coupled to one of the plurality of separate ultrasound transducer elements.

25. ~~46.~~ (Currently amended.) The ultrasound transducer of Claim 23 44, further comprising a housing in which the plurality of separate ultrasound transducer elements are disposed.

26. ~~47.~~ (Currently amended.) The ultrasound transducer of Claim 23 ~~44~~, further comprising a plurality of leads separately coupled to each of the plurality of separate ultrasound transducer elements to provide a driving signal thereto.

27. ~~48.~~ (Currently amended.) The ultrasound transducer of Claim 23 ~~44~~, wherein each of the plurality of separate ultrasound transducer elements comprises a composite mixture that includes a piezo ceramic, an adhesive binder, and thermally conductive particles.

28. ~~49.~~ (Currently amended.) A method of mechanically controlling at least one

of a desired direction and at a desired focal point of an ultrasound beam emitted by a plurality of separate ultrasound transducer elements, comprising the steps of:

(a) providing a plurality of separate ultrasound transducer elements that are pivotally mounted to rotate when actuated by a linkage;

(b) actuating the plurality of separate ultrasound transducer elements so that each emit an ultrasound signal; and

(c) selectively rotating the plurality of separate ultrasound transducer elements about their respective axes so that the ultrasound signals they produce are combined in an ultrasound beam that is directed in at least one of a desired direction and at a desired focus.

REMARKS

The proposed amendments presented no new matter and support for Applicant's proposed changes can be found in the specification. Applicants respectfully submit that the present claims present patentable subject matter and request the early allowance thereof. Should you have any questions or issues, please feel free to contact me at (206) 832-4636.

Respectfully submitted,

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